

REMARKS

The Office Action dated April 16, 2009, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

By this Response, claims 1, 3, 5, and 10-20 have been amended to more particularly point out and distinctly claim the subject matter of the present invention. No new matter has been added. Support for the above amendments is provided in the Specification, at least, on page 6, line, to page 12, line 12. Accordingly, claims 1-20 are currently pending in the application, of which claims 1, 12, and 16-17 are independent claims.

In view of the above amendments and the following remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending rejections to the claims for the reasons discussed below.

Double Patenting

The Office Action rejected claim 20 under 37 C.F.R. § 1.75 as allegedly being a substantial duplicate of claim 19, with respect to claim 19's dependency on claim 17. Applicant respectfully traverses this rejection.

Claim 20 depends from independent claim 17. Contrary to the Office Action's allegations, claim 19 depends from independent claim 16. Accordingly, dependent

claims 19 and 20 recite different elements, and therefore are not duplicates of one another. The double patenting rejection of claim 20 is improper.

Therefore, Applicant respectfully requests withdrawal of the double patenting rejection of claim 20, and respectfully submits that claim 20 is in condition for allowance.

Claim Rejections under 35 U.S.C. §112, Second Paragraph

The Office Action rejected claim 16 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which is regarded as the invention. Specifically, the Office Action alleged that, the following terms lack proper antecedent basis: “a) wherein said switching node...”, “b) wherein said switching node...”, and “to be set up to said other switching node...”.

Applicant has amended claim 16 to more particularly point out and distinctly claim the subject matter of the invention. In particular, the Applicant has amended claim 16 to recite “an apparatus” and “a switching node,” rendering the rejection of claim 16 under 35 U.S.C. §112, second paragraph, moot.

Therefore, Applicant respectfully requests withdrawal of the rejection of claim 16 under 35 U.S.C. §112, second paragraph, and respectfully submits that claim 16 is in condition for allowance.

Claim Rejections under 35 U.S.C. §102(a)

The Office Action rejected claims 1-9 and 12-15 under 35 U.S.C. §102(a) as allegedly anticipated by 3GPP TR 23.846 (“TR 23.846”). Applicant respectfully submits that the claims recite subject matter that is neither described nor suggested in TR 23.846.

Claim 1, upon which claims 2-11, recites a method. The method includes providing to a first switching node information indicating a number of connections required between a second switching node and a plurality of terminal devices. The method further includes determining based on the provided information a number of connections to be set up between the first switching node and the second switching node of a data network to set up a broadcast or multicast transmission for a broadcast or multicast service to the plurality of terminal devices.

Claim 12, upon which claims 13-15 depend, recites a system. The system includes a first switching node and a second switching node. The first switching node is configured to set up an initial connection to the second switching node. The second switching node is configured to transmit to the first switching node via an initial connection information indicating a number of connections required between the second switching node and a plurality of terminal devices. The first switching node is further configured to determine based on the information a number of connections to be set up between the first switching node and the second switching node to set up a broadcast or multicast transmission for a broadcast or multicast service to the plurality of terminal devices.

As will be discussed below, TR 23.846 fails to describe or suggest each and every element feature recited in claims 1-9 and 12-15, and therefore fails to provide the features discussed above.

TR 23.846 describes the architectural issues and functionalities for multimedia broadcast/multicast service (“MBMS”) as defined by the 3rd generation partnership project. (See TR 23.846, “Scope”).

Applicant respectfully submits that TR 23.846 fails to describe or suggest each and every element recited in claim 1. In particular, TR 23.846 fails to describe or suggest, at least, “providing to a first switching node information indicating a number of connections required between a second switching node and a plurality of terminal devices; and determining based on said provided information a number of connections to be set up between said first switching node and said second switching node of a data network to set up a broadcast or multicast transmission to the plurality of terminal devices,” as recited in claim 1 (emphasis added).

The Office Action cited the single connection established between a SGSN and a GGSN for each MBMS service as described in section 6.1.4 of TR 23.846 and step 6 of section 7.4 to allege that TR 23.846 describes each and every element recited in the pending claims. However, a review of these sections of TR 23.846 in relation to the entirety of TR 23.846 demonstrates that TR 23.846 fails to describe or suggest each and every element recited in claim 1.

Sections 6.1.4 and 7.4 of TR 23.846 each describe that a single connection is established between the SGSN and the GGSN for each MBMS service. In particular, Section 6.1.4 of TR 23.846 describes that there is an establishment of a number of RABs to transfer the MBMS data to radio network entities of a related service area, including a single connection between the SGSN and the GGSN for each individual MBMS service. Thus, only a single connection is established between the SGSN and the GGSN for each MBMS service. Whereas, certain embodiments of the invention, as recited at least in claim 1, provides “a number of connections to be set up between said first switching node and said second switching node,” *i.e.*, plural connections are set up.

One of ordinary skill in the relevant art would have understood that no information is required indicating the number of connections between the second switching node and the plurality of terminal devices because there is only a single connection between the SGSN and the GGSN described in TR 23.846. Additionally, contrary to the Office Action’s allegations, no information, as recited in the pending claims, exists in the messages described in TR 23.846. Accordingly, TR 23.846 fails to describe or suggest each and every element recited in claim 1.

Claim 12 has its own claim scope, but also contains additional limitations similar to those recited in claim 1. Accordingly, for similar reasons noted above for claim 1, Applicant respectfully submits that TR 23.846 fails to describe or suggest each and every element recited in claim 12.

Claims 2-9 depend from claim 1. Claims 13-15 depend from claim 12. Accordingly, claims 2-9 and 13-15 should be allowable for at least their dependency upon an allowable base claim, and for the specific limitations recited therein.

Therefore, Applicant respectfully requests withdrawal of the rejections of claim 1-9 and 12-15 under 35 U.S.C. §102(a), and respectfully submits that claims 1 and 12, and the claims that depend therefrom, are now in condition for allowance.

Claim Rejections under 35 U.S.C. §103(a)

Claims 10 and 16

The Office Action rejected claims 10 and 16 under 35 U.S.C. §103(a) as being allegedly unpatentable over TR23846 in view of Leroy (European Publication No. EP 1071296 A1) (“Leroy”). Applicant respectfully submits that the claims recite subject matter that is neither described nor suggested in the combination of TR 23.846 and Leroy.

TR 23.846 was discussed above. Leroy is directed to a method for transferring multicast data packets to mobile stations and a related gateway, service and routing nodes. (*See* Leroy, paragraphs [0001]-[0002]).

As previously discussed above, TR 23.846 fails to describe or suggest each and every element recited in claim 1. Leroy fails to cure the deficiencies of TR 23.846. In particular, Leroy fails to describe or suggest, at least, “providing to a first switching node information indicating a number of connections required between a second switching

node and a plurality of terminal devices; and determining based on said provided information a number of connections to be set up between said first switching node and said second switching node of a data network to set up a broadcast or multicast transmission to the plurality of terminal devices,” as recited in claim 1 (emphasis added). Accordingly, the combination of TR 23.846 and Leroy fails to disclose or suggest each and every element recited in claim 1.

Claim 16, upon which claim 19 depends, recites, in part, “access a memory table in order to derive information indicating a number of connections required between a switching node and a plurality of terminal devices, and determine based on said derived information a number of connections to be set up to said switching node to set up a broadcast or multicast transmission for one multicast/broadcast multimedia service to said plurality of terminal devices” (emphasis added).

Accordingly, claim 16 has its own claim scope, but also contains additional limitations similar to those recited in claim 1. Accordingly, for similar reasons noted above for claim 1, Applicant respectfully submits that the combination of TR 23.846 and Leroy fails to describe or suggest each and every element recited in claim 16.

Claim 10 depends from claim 1. Accordingly, claim 10 should be allowable for at least its dependency upon an allowable base claim, and for the specific limitations recited therein.

Therefore, Applicant respectfully requests withdrawal of the rejections of claim 10 and 16 under 35 U.S.C. §103(a), and respectfully submits that claims 1 and 16, and the claims that depend therefrom, are now in condition for allowance.

Claims 11 and 19

The Office Action rejected claims 11 and 19 under 35 U.S.C. §103(a) as being allegedly unpatentable over TR 23.846 in view of Mizell (U.S. Patent No. 7,289,462). Applicant respectfully submits that the claims recite subject matter that is neither described nor suggested in the combination of TR 23.846 and Mizell.

TR 23.846 was discussed above. Mizell is directed to a method and apparatus for network-initiated context activation using dynamic DNS updates. Mizell describes a reservation of dynamic IP addresses to enable a push server to initiate a PDP context as a part of providing push service without timing out. (See Mizell, col. 3, lines 1-28).

As previously discussed above, TR 23.846 fails to describe or suggest each and every element recited in claims 1 and 16. Mizell fails to cure the deficiencies of TR 23.846. In particular, Mizell fails to describe or suggest, at least, “providing to a first switching node information indicating a number of connections required between a second switching node and a plurality of terminal devices; and determining based on said provided information a number of connections to be set up between said first switching node and said second switching node of a data network to set up a broadcast or multicast transmission to the plurality of terminal devices,” as recited in claim 1 (emphasis added),

and similarly recited in claim 16. Accordingly, the combination of TR 23.846 and Mizell fails to disclose or suggest each and every element recited in claims 1 and 16.

Claims 11 depends from claim 1. Claim 19 depends from claim 16. Accordingly, claims 11 and 19 should be allowable for at least their dependency upon an allowable base claim, and for the specific limitations recited therein.

Therefore, Applicant respectfully requests withdrawal of the rejection of claims 11 and 19 under 35 U.S.C. §103(a), and respectfully submits that claims 1 and 16, and the claims that depend therefrom, is now in condition for allowance.

Claims 17-18 and 20

The Office Action rejected claims 17-18 and 20 under 35 U.S.C. §103(a) as being allegedly unpatentable over Mizell in view of the Office taking Official Notice. Applicant respectfully submits that the claims recite subject matter that is neither described nor suggested in Mizell or the Office taking Official Notice.

Claim 17, upon which claims 18 and 20 depend, recites, in part, “query, using a multicast identification or a multicast area identification, from an address server information indicating a number of connections required between a switching node and a plurality of terminal devices, and determine based on said queried information a number of connections to be set up to said switching node to set up a broadcast or multicast transmission for one multicast/broadcast multimedia service to said plurality of terminal devices” (emphasis added).

Mizell was discussed above. Applicant respectfully submits that Mizzell fails to disclose or suggest at least the aforementioned elements recited in claim 17.

The Office Action cited the GGSN described in column 3, lines 18-28, column 5, lines 62-67, and column 6, lines 1-8, in Mizell to allege that Mizell describes the aforementioned features of claim 17. The Office Action noted that the GGSN is arranged to determine one connection is required to be set up (*See* Office Action on page 8). However, a review of these passages of Mizell in relation to the entirety of Mizell demonstrates that Mizell fails to disclose or suggest each and every element recited in claim 17.

As previously discussed, Mizell specifically describes that a GGSN establishes a single connection for a mobile user. Whereas, certain embodiments of the invention, as recited at least in claim 17, provides “a number of connections to be set up between said first switching node and said second switching node ... to set up a broadcast or multicast transmission for one multicast/broadcast multimedia service to said plurality of terminal devices,” *i.e.*, plural connections are set up for one multicast/broadcast multimedia service.

One of ordinary skill in the relevant art would have understood that no information is required indicating the number of connections between the GGSN and the mobile terminal because there is only a single connection between the GGSN and the mobile terminal described in Mizell. Additionally, contrary to the Office Action’s allegations, no information, as recited in the pending claims, exists in the messages described in

Mizell. Accordingly, Mizell fails to describe or suggest each and every element recited in claim 17.

The Office taking Official Notice that one of ordinary skill in the relevant art would have found it obvious to specify a multicast identification or a multicast area identification does not cure the deficiencies of Mizell. Accordingly, the combination of Mizell and the Office taking Official Notice fails to describe or suggest each and every element recited in claim 17.

Claims 18 and 20 depend from claim 17. Accordingly, claims 18 and 20 should be allowable for at least their dependency upon an allowable base claim, and for the specific limitations recited therein.

Therefore, Applicant respectfully requests withdrawal of the rejection of claims 17-18 and 20 under 35 U.S.C. §103(a), and respectfully submits that claim 17, and the claims that depend therefrom, is now in condition for allowance.

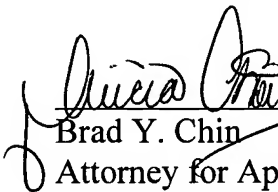
CONCLUSION

For the reasons set forth above, it is respectfully submitted that each of claims 1-20 recites subject matter that is neither disclosed nor suggested in TR 23.846, Leroy, and Mizell, whether taken individually or in combination. The distinctions previously noted are more than sufficient to render the claimed invention unanticipated and non-obvious. It is, therefore, respectfully requested that all of claims 1-20 be allowed, and that this application be passed to issuance.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicant's undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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